

# **FISH CONSUMPTION SURVEY IN MINNESOTA AND NORTH DAKOTA**

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## **ABSTRACT**

Recently, a study of North Dakota and Minnesota residents' fish consumption was conducted to estimate fish consumption rates and methylmercury exposure. The results of other such surveys conducted in the United States have been reviewed and compared to the North Dakota and Minnesota studies. The fish consumption rates in the United States, based on national surveys, show a median range of 8.1–18.7 g/day. In this survey, the median consumption rates were found to be 12.3 and 12.6 g/day for Minnesota and North Dakota, respectively. The upper-level exposure rates (95th percentile) of 62.7 g/day for Minnesota and 64.9 g/day for North Dakota were also within the range of 41–78 g/day (95th percentile) determined for national surveys. Sport-caught fish consumption (medians) in Minnesota and North Dakota were 3.9 and 4.5 g/day, respectively. These rates appear low compared to other surveys that indicate the levels of sport-caught fish to be in the range of 12.3–14.5 g/day. The upper-level intake (95th percentile) for sport-caught fish in Minnesota and North Dakota are 32.1 and 33.9 g/day, respectively.

The estimated mercury exposure determined for the adults in both Minnesota and North Dakota show very similar mercury exposures as reported by the U.S. Environmental Protection Agency. The results of comparisons of the estimated mercury exposure for children are also very similar. The results for North Dakota children indicated slightly higher exposures to mercury. Hair samples were obtained and analyzed in order to better characterize the potential exposure of selected respondents to mercury through fish consumption and to provide information that can be used to assess the ability of the fish questionnaire to provide estimates of exposure to mercury.